

REMARKS

Claims 1-8, 10-32, 34-46, 48, 50 and 52-59 are currently pending in the present application.

In the Office Action dated July 27, 2007 (hereinafter, "Office Action"), claims 2-8, 12-14, 22-32, 34-38, 46, 48, 50 and 52 are allowed. The status of claims 53 and 54 was not specifically mentioned; however, claims 53 and 54 are also presumed allowed as depending from allowed independent claim 52. Claims 1, 3 and 4-8 stand objected because of informalities. Claims 1, 10, 11, 15-21, 39-45 and 55-59 stand rejected. In the foregoing amendments, claims 1, 3 and 4 have been amended to overcome the objection.

Applicant respectfully requests reconsideration of the application in light of the amendments above and remarks below.

Claim Objections

Claims 1, 3 and 4-8 stand objected to because of the following informalities:

In claim 1 (line 1), "operable" is not a positive recitation.

In claim 3 (lines 1, 13), "operable", is not a positive recitation.

In claim 4, (lines 1, 13), "operable", is not a positive recitations.

In the foregoing amendments, claims 1, 3 and 4 have been amended to remove the term "operable" from recitation in the claims. Claims 5-8 have been previously amended to depend from independent claim 52, rather than independent claim 1 as originally filed. Accordingly, Applicant respectfully requests that the objection of claims 1, 3 and 4-8 be withdrawn.

35 U.S.C. § 103 Obviousness Rejections

Claims 1, 10-11, 15-21, 39-45, 55-59 stand rejected as being unpatentable over U.S. Patent No. 5,754,537 to Jamal (hereinafter, "Jamal") in view of U.S. Patent No. 6,880,103 to Kim (hereinafter, "Kim"). Applicant respectfully traverses this rejection, as hereinafter set forth.

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 985

(CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicant’s disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1, 10-11, 15-21, 39-45, 55-59 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art references must teach or suggest all the claims limitations.

Regarding Applicant’s rejected independent claims 1, 10, 11, 15, 18, 21, 39, 42, 45 and 55-59, the Office Action concedes and alleges:

Regarding [independent] claim 1, ... Jamal differs from the claimed invention in that Jamal does not disclose transmitting [a] busy signal. However, Kim ... discloses transmitting busy [signal] (column 7, lines 4-15). (Office Action, pp. 2-3).

Regarding [independent] claim 10, ... Jamal differs from the claimed invention in that Jamal does not disclose receiving a busy signal from the base station. However, Kim ... discloses receiving [a] busy signal from [the] base station (column 7, lines 4-15). (Office Action, pp. 3-4).

Regarding [independent] claim 11, ... Jamal differs from the claimed invention in that Jamal does not disclose receiving a busy signal from the base station. However, Kim ... discloses receiving [a] busy signal from [the] base station (column 7, lines 4-15). (Office Action, p. 5).

Regarding [independent] claims 15, [], 55, 57, 58, 59, ... Jamal differs from the claimed invention in that Jamal does not teach that the transmission rate is decreased in response to an assertion on the received busy signal. However, Kim ... discloses that the transmission rate is decreased in response to an assertion on the received busy signal (column 7, lines 4-15). (Office Action, p. 6).

Regarding [independent] claims 18, [], 21, ... Jamal differs from the claimed invention in that Jamal does not teach received busy signal. However, Kim ... discloses

received busy signal from [the] base station (column 7, lines 4-15). (Office Action, p. 7).

Regarding [independent] claims 39, [], 45, 56,... Jamal differs from the claimed invention in that Jamal does not teach that the transmission rate decrease in response to an assertion on the received busy signal. However, Kim ... discloses that the transmission rate is decreased in response to an assertion on the received busy signal (column 7, lines 4-15). (Office Action, pp. 7-8).

Regarding [independent] claim[] 42, ... Jamal differs from the claimed invention in that Jamal does not teach that the transmission rate is increased in response to an assertion on the received busy signal. However, [Kim] ... discloses that the transmission rate is increased in response to an assertion on the received busy signal (column 7, lines 4-15). (Office Action, pp. 8-9).

While the Office Action alleges Kim teaches a “busy signal” as claimed by Applicant, Applicant respectfully disagrees. Generally, while Kim uses the common term “busy signal,” Kim teaches a “busy signal” that functions according to an “acknowledgement” after data transmission rather than for “congestion control” prior to data transmission. In Kim, data is transmitted to the base station and then the base station sends a “busy signal” to the remote station. If Kim’s “busy signal” is not received by the remote station, then the transmission was not properly received by the base station. Specifically, Kim teaches:

When the packet data is transmitted normally to the base station 20, that is, when the base station 20 perceives the data transmission from the terminal 10, the base station 20 generates a channel occupying signal (hereinafter, referred to as a ‘busy signal’) by acquiring synchronization and allocating channels. In addition, the base station 20 transmits the busy signal to the terminal 10 through the controlling channel in a down link. On the other hand, the terminal 10 identifies whether or not the busy signal of the base station 20 is transmitted at a certain time point (τ_2 and τ_3) after a certain propagation delay time from the time when the packet data is transmitted (S110). (Kim, col. 7, lines 4-15; emphasis added).

As a result of the above identification, if the busy signal is not transmitted from the base station 20, that is, the base station 20 does not perceive the packet data transmission from the terminal 10 because of some reason, such as a weak transmission electric power, the terminal 10 immediately stops the data transmission and is allocated a random re-transmission time point from the starting point controlling unit 140 (S160). Thereafter, the terminal 10 transmission process feeds back to the above step S100 and the terminal 10 tries to re-transmit the packet data (S130, S150, and S160). (Kim, col. 7, lines 16-26; emphasis added).

In contrast to Kim's "busy signal" used as an acknowledgment after a data transmission has already occurred, Applicant's invention as claimed is directed to generating a "busy signal" in response to one or more "access requests" to use a "shared resource" for transmitting data. The access requests are used to determine a "measured utilization" of the "shared resource" before any data transmission occurs. Specifically, Applicant's invention as presently claimed recites, in part:

Claim 1: ... in response to the plurality of *access requests*, ... generating a *busy command* in response to the measured utilization ... and ... transmitting a *busy signal* comprising one or more *busy commands*.

Claims 10, 11, 15, 18, 21, 55: ... generating an *access request* message when the data buffer contains data for transmission ... and ... transmitting a portion of data ... in accordance with the *received busy signal*

Claims 39, 42, 45, 56, 57, 58, 59: ... generating an *access request* message ... and ... transmitting a portion of data ... in accordance with the *received busy signal*

Although Kim uses the term "busy signal," nothing within Kim teaches or suggests a "busy signal" as claimed by Applicant. Therefore, because neither Jamal (by the Office Action's own admission) nor Kim teach or suggest Applicant's claimed invention including the generation of a "busy signal" in response to "access requests" prior to any data transmission, as claimed by Applicant, these references, either individually or in any proper combination, cannot render obvious, under 35 U.S.C. §103, Applicant's invention as presently claimed in independent claims 1, 10, 11, 15, 18, 21, 39, 42, 45 and 55-59. Accordingly, Applicant respectfully requests the rejection of independent claims 1, 10, 11, 15, 18, 21, 39, 42, 45 and 55-59 be withdrawn.

The nonobviousness of independent claim 15 precludes a rejection of claims 16 and 17 which depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see also MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 15 and claims 16 and 17 which depend therefrom.

The nonobviousness of independent claim 18 precludes a rejection of claims 19 and 20 which depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. See In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), see

also MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 18 and claims 19 and 20 which depend therefrom.

The nonobviousness of independent claim 39 precludes a rejection of claims 40 and 41 which depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 39 and claims 40 and 41 which depend therefrom.

The nonobviousness of independent claim 42 precludes a rejection of claims 43 and 44 which depend therefrom, because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 42 and claims 43 and 44 which depend therefrom.

Allowable Subject Matter

In the Office Action, claims 2-8, 12-14, 22-32, 34-38, 46, 48, 50 and 52-54 are allowed. Applicant thanks the Examiner for indication of allowable subject matter. A statement of reasons for allowable subject matter was set forth by the Examiner in the Office Action. While Applicants agree that claims 2-8, 12-14, 22-32, 34-38, 46, 48, 50 and 52-54 are allowable for at least the reasons set forth in the Examiner's statement, Applicant submits that the invention as recited by the claims and as described in the present application is patentable over the art of record for reasons in addition to those listed in the Examiner's statement. Accordingly, Applicants reserve the right to pursue claims of different scope from those in the present application.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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